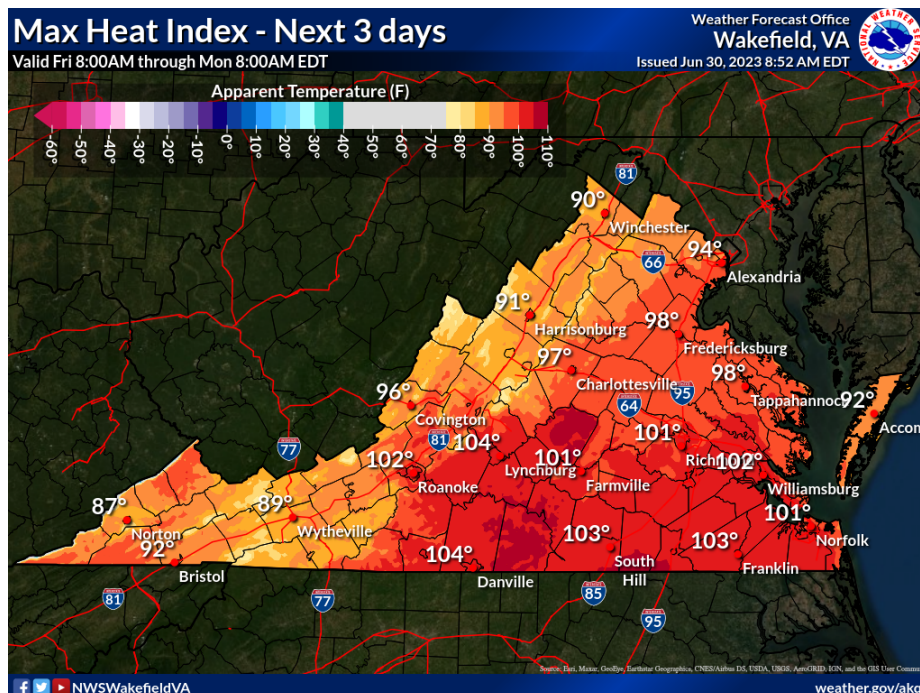


June 30, 2023

Key Takeaways

- Respiratory disease rates remain low across the Commonwealth. Flu has largely tapered out. COVID-19 hospitalizations are up slightly but remain lower than they were in May. Most wastewater facilities are reporting that COVID-19 viral loads are too low to detect. None are reporting growth.
- A new COVID-19 variant (EU.1.1) is growing quickly in the American southwest. So far it does not seem to be causing an increase in cases.
- Smoke from Canadian wildfires has blanketed Virginia in particulate matter. This has greatly reduced air quality and threatens sensitive individuals. The inflammation caused by exposure to smoke may also make people more vulnerable to respiratory infections. As such, even healthy individuals should avoid prolonged exposure to the smoke, which is expected to dissipate in the coming days.
- Temperatures are expected to exceed 100° F across much of the Commonwealth in the coming week. Combined with wildfire smoke, the heat may make outdoor work and recreation difficult.
- Florida and Texas are battling unrelated, locally acquired malaria outbreaks. The CDC has issued a health advisory for the affected areas.
- Colorado is reporting a handful of new mpox cases. Europe has also reported some growth. The CDC warns that another summer outbreak may be possible.

Key Figures



Source: [National Weather Service](https://www.weather.gov/akq)

COVID-19

19%

Chance that the WHO will identify a new COVID-19 Variant of Concern before 2024. (*Metaculus forecast*)

94

COVID-19 hospital beds in use in Virginia for the week ending June 24.

0 / 7

Number of wastewater facilities reporting growth / plateau viral loads (out of 42).

Wildfires

228 of 495

The number of uncontrolled wildfires in Canada, out of the total number of active fires.

Air Quality

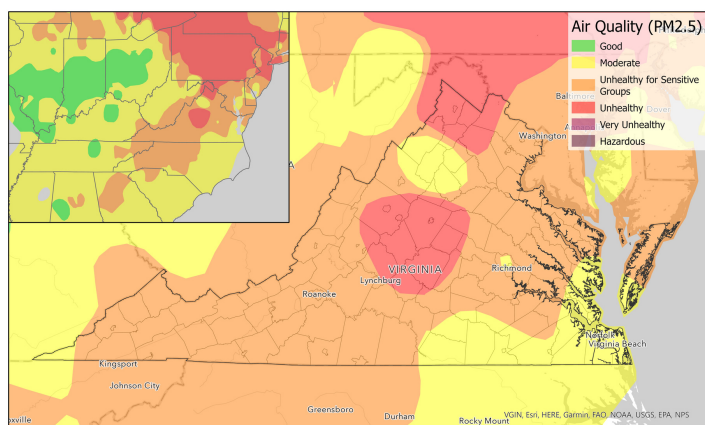
190

Peak AQI value detected on June 29th (in Frederick County at noon).

Spotlights: Air Quality

Forecasts are italicized

Spotlight



Smoke from forest fires is filling the air with particulate matter, causing unsafe air quality conditions across much of Virginia.
Data source: airnow.gov (data from June 30, 1:00 PM)

Air Quality

- **Smoke from Canadian wildfires blankets Virginia.** Repeating the events of early June, the Commonwealth is once again being smothered by a layer of particulate matter from fires in Quebec. The fire smoke has blanketed the Mid-Atlantic and extends as far west as Wisconsin. The resulting poor air quality can be particularly harmful to those with asthma, chronic obstructive pulmonary disease (COPD), or heart disease. The CDC advises those with these conditions to remain indoors as much as possible until the air quality returns to normal.

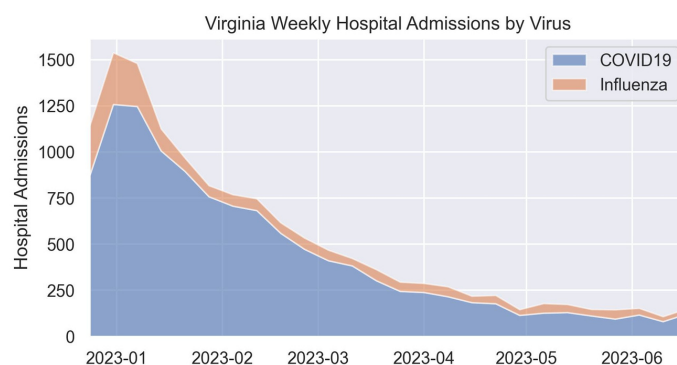
| Today's Forecast | | | | | Tomorrow's Forecast | | | | |
|-------------------|-----|--------------------------------|-----------|--|---|-------------|--------------------------------|-----------|--|
| Region | AQI | Class | Pollutant | Activity Caution | Risk Groups | AQI | Class | Pollutant | Risk Groups |
| HAMPTON ROADS | 84 | Moderate | OZONE_PPB | Unusually sensitive people should consider reducing prolonged or heavy outdoor exertion. | Children and people with asthma are the groups most at risk. | 89 | Moderate | PM25SLC | Unusually sensitive people should consider reducing prolonged or heavy exertion. |
| NORTHERN VIRGINIA | 164 | Unhealthy | PM25SLC | People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion; everyone else should reduce prolonged or heavy exertion. | People with respiratory or heart disease, the elderly and children are the groups most at risk. | 149 | Unhealthy for Sensitive Groups | PM25SLC | People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion. |
| RICHMOND | 102 | Unhealthy for Sensitive Groups | PM25SLC | People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion. | People with respiratory or heart disease, the elderly and children are the groups most at risk. | 89 | Moderate | PM25SLC | Unusually sensitive people should consider reducing prolonged or heavy exertion. |
| ROANOKE | 182 | Unhealthy for Sensitive Groups | PM25SLC | People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion. | People with respiratory or heart disease, the elderly and children are the groups most at risk. | No Forecast | | | |
| WINCHESTER | 166 | Unhealthy | PM25SLC | People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion; everyone else should reduce prolonged or heavy exertion. | People with respiratory or heart disease, the elderly and children are the groups most at risk. | 137 | Unhealthy for Sensitive Groups | PM25SLC | People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion. |

June 29th forecasts from the [Virginia Dept. of Environmental Quality](https://www.vdh.virginia.gov/EnvironmentalQuality) suggest that air quality will improve in the coming days.

Other News

- **CDC tracks flu activity in the southern hemisphere.** The southern hemisphere's flu season (April to September) can sometimes give us clues as to what may be in store for the U.S. come winter. So far, the results are somewhat mixed. While South Africa has reported higher than expected flu rates, both Argentina and Australia report average rates. Influenza A(H1N1) is the most commonly reported strain.
- **CDC tracking new COVID-19 variants.** Among them is a variant called EU.1.1 which represents 8.7% of new cases in the American southwest. So far, it does not seem to have an enormous growth advantage, and a surge is not expected.
- **Report suggests number of "mosquito days" increasing.** The report from [Climate Central](https://www.climatecentral.org) measured the number of days favorable to mosquitoes (>42% humidity and 50-95° F) by decade. They found that most areas in the Mid-Atlantic are seeing more annual mosquito days than they did in the 1980s. They report that Norfolk sees 21 more mosquito days than it did in 1979, and Richmond sees 18 more.
- **Locally acquired malaria detected in United States.** The CDC released an official health advisory on Monday as it detected local transmission of Malaria in both Florida and Texas. This marks the first time since 1994 that either state has suffered from a local outbreak.

- **COVID-19 hospitalizations increase; not cause for alarm.** Though flu hospitalizations in the Commonwealth have remained relatively constant, last week saw a large jump in COVID-19 hospitalizations from 94 to 128 (per [CDC](https://www.cdc.gov)). Though this represents a near 35% increase in one week, it is lower than hospitalizations reported in the first week of June (130). Weekly COVID-19 hospitalizations have oscillated between roughly 80 and 130 since the end of April. This current jump is neither surprising nor concerning. That said, the newly detected EU.1.1 variant has the potential to cause some mild growth in the coming weeks.



New hospitalizations from flu and COVID-19 in Virginia have remained low since the end of April. Source: [HealthData.gov](https://www.healthdata.gov)